

## **Espacenet**

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#### MOBILE ARTICLE TRACKING APPARATUS BY CAMERA IMAGE AND METHOD AND APPARATUS FOR CALIBRATING CAMERA PARAMETER

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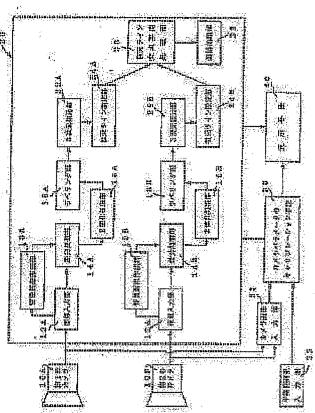
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#### Abstract of JP 2003284059 (A)

PROBLEM TO BE SOLVED: To provide a mobile article tracking apparatus by a camera image which can simply and accurately process to detect and track a moving article as an object to be monitored by using a plurality of cameras in a required monitoring region and to provide a method and an apparatus for calibrating a camera parameter.; SOLUTION: The mobile article tracing apparatus comprises two or more cameras 10A, 10B for imaging the region to be monitored; an input image arithmetic processing means 20 including a detection processing means of the moving article which difference processes between the input images and a background image by comparing the input images with the background image of the input image by inputting camera image signals imaged by the cameras, binarizing the image, labeling and processing to three-dimensional restore the image, a moving position information processing means of the article which calculates the position information by detecting the article of the object to be monitored from a crossing point of a restoring line by setting the restoring line based on the three-dimensionally restored input image, and a display means 40 for selectively displaying the entirety or a part of the moving position information of the article together with the camera image obtained by the input image arithmetic processing means.; COPYRIGHT: (C) 2004,JPO



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### Abstract of JP 2003-284059 (Cited reference 1)

PROBLEM TO BE SOLVED: To provide a mobile article tracking apparatus by a camera image which can simply and accurately process to detect and track a moving article as an object to be monitored by using a plurality of cameras in a required monitoring region and to provide a method and an apparatus for calibrating a camera parameter.

SOLUTION: The mobile article tracing apparatus comprises two or more cameras 10A, 10B for imaging the region to be monitored; an input image arithmetic processing means 20 including a detection processing means of the moving article which difference processes between the input images and a background image by comparing the input images with the background image of the input image by inputting camera image signals imaged by the cameras, binarizing the image, labeling and processing to three-dimensional restore the image, a moving position information processing means of the article which calculates the position information by detecting the article of the object to be monitored from a crossing point of a restoring line by setting the restoring line based on the three-dimensionally restored input image, and a display means 40 for selectively displaying the entirety or a part of the moving position information of the article together with the camera image obtained by the input image arithmetic processing means.